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Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	09/754,650	DEL SESTO ET AL.	
	Examiner	Art Unit	
	Christopher M. Lambrecht	2611	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *20 December 2004*.

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-28* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-28* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date *12/20/04; 4/29/05*.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

DETAILED ACTION

Response to Arguments

1. Applicant's arguments with respect to claims 1-28 have been considered but are moot in view of the new ground(s) of rejection.

Claim Rejections - 35 USC § 103

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

3. Claims 1-5, 7-14, 17, 19, 20-22, 24, 27, and 28 are rejected under 35 U.S.C. 103(a) as being unpatentable over Zdepski (of record) in view of U.S. Patent No. 5,734,413 to Lappington et al. (hereinafter "Lappington").

Considering claim 1, Zdepski discloses a system for providing interactive content (fig. 1, col. 3, ll. 49-51) comprising:

hardware (trigger extraction unit 56, fig. 1) adapted to receive one or more first video streams (combined signal, fig. 1) that include video data and an interactive content code (trigger, col. 4, ll. 7-10), wherein the hardware is further to produce a second video stream (television signal at output of element 56, fig. 1);

an interactive content code detector (trigger extraction unit 56) adapted to detect an interactive content code (interactive program ID, col. 4, ll. 51-58) identified in the interactive content code (trigger, col. 4, ll. 51-58), and to produce (providing to interactive program source 58) a control signal (the extracted trigger) responsive to detecting (extracting) the interactive content code (trigger) (col. 4, ll. 19-24); and

a data insertion unit (interactive program source 58, data input unit 66, and AVI transmission unit 68) adapted to receive (from 56, col. 4, ll. 21-22) the control signal (extracted trigger) and to insert (providing to AVI transmission unit 68 for combining with television signal, col. 4, ll. 28-38) interactive content (interactive program) into the second video stream (television signal) responsive to (in accordance with, col. 4, ll. 29-30) information (fields 82, 84, and 86 of trigger, fig. 2) contained in the control signal (extracted trigger), resulting in a third video stream (AVI signal, fig. 1).

Zdepski additionally discloses the interactive content code is encoded in the vertical blanking interval of the television signal, but fails to disclose encrypting the interactive content code.

In an analogous art, Lappington discloses encrypting data encoded within the vertical blanking interval of a television signal, for the purpose of ensuring reliable transmission thereof (col. 18, ll. 17-19).

Accordingly, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the system of Zdepski to include encrypting the interactive content code, for the purpose of ensuring reliable transmission of the interactive data.

As for claim 2, Zdepski and Lappington together disclose the system of claim 1. In addition, Zdepski discloses the data insertion unit (58, 66, and 68) is positioned to insert interactive content into the second video stream (television signal) prior to the third video stream (AVI signal) being transmitted to a transmission source (satellite uplink 62), causing the interactive content to remain in the third video stream upon transmission (i.e., interactive content is inserted into the video stream at 68, and is then transmitted to satellite uplink 62, with no intervening equipment in signal path between AVI transmission unit 68 and satellite uplink 62, see fig. 1).

As for claim 3, Zdepski and Lappington together disclose the system of claim 1. In addition, Zdepski discloses a video stream generator (television signal source 12) generates the first video stream

(television signal), and the interactive content detector (56) is coupled (via demodulator 54, satellite links 52 and 20, modulator 18, and trigger insertion unit 16) to an output of the video stream generator.

As for claim 4, Zdepski and Lappington together disclose the system of claim 1, wherein the encrypted interactive content code is received in a different stream (vertical blanking interval, Zdepski, col. 5, ll. 1-5) from a stream used to carry the video data (where VBI data constitutes a different stream from video data transmitted in the active lines of an NTSC signal).

As for claim 5, Zdepski and Lappington together disclose the system of claim 1. In addition, Zdepski discloses the interactive content code detector (56) and the data insertion unit (58, 66, and 68) are coupled to a same point (broadcast station 50) in the transmission path (i.e., path from source 12 to end users).

As for claim 7, Zdepski and Lappington together disclose the system of claim 1, wherein the encrypted interactive content code is located in a vertical blanking interval of the first video stream (Zdepski, col. 5, ll. 1-5), and wherein the interactive content code detector (56) includes a vertical blanking interval line reader (col. 5, ll. 24-26).

With regard to claim 8, Zdepski discloses a method for providing interactive content (col. 3, ll. 49-51) in a broadcast facility (50, fig. 1) that transmits a video broadcast stream (AVI signal) containing video along a transmission path for delivery to end users (col. 4, ll. 34-38) and contains equipment (A-V compression unit 64) that may corrupt interactive content (according to page 6, ll. 3-6 of the specification of the instant application, such equipment includes video compression hardware), the method comprising:

inserting (by trigger insertion unit 16) an interactive content code (trigger, col. 4, ll. 51-58) into a

first video broadcast stream (television signal, col. 4, ll. 7-10), resulting in a second video stream (combined television-trigger signal, fig. 1) with embedded interactivity (i.e., embedded interactive content trigger), wherein the interactive content code specifies an interactive content to accompany a video broadcast (col. 4, ll. 47-51);

processing the second video stream (combined signal), to produce a third video stream (television signal at output of 56, fig. 1); and

inserting an interactive content corresponding to (associated with, col. 4, ll. 47-50) the interactive content code (trigger) into the third video stream to produce a fourth video stream, which includes the interactive content (combining the interactive program content with the compressed audio/video content, col. 4, ll. 33-38) and the interactive content code (module ID, see col. 4, ll. 58-67 and col. 7, ll. 37-40 of U.S. Patent No. 5,448,568 to Delpuch et al., incorporated by reference in Zdepski, col. 6, ll. 45-49).

Zdepski additionally discloses the interactive content code is encoded in the vertical blanking interval of the television signal, but fails to disclose encrypting the interactive content code.

In an analogous art, Lappington discloses encrypting data encoded within the vertical blanking interval of a television signal, for the purpose of ensuring reliable transmission thereof (col. 18, ll. 17-19). Accordingly, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the system of Zdepski to include encrypting the interactive content code, for the purpose of ensuring reliable transmission of the interactive data.

As for claim 9, Zdepski discloses the method of claim 8 (see above) wherein inserting an interactive content further comprises inserting an interactive content corresponding to the interactive content code (col. 4, ll. 47-51) at a point in the transmission path after a last point in the transmission path where the interactive content may be corrupted (see fig. 1, the interactive content is inserted into the video stream at AVI transmission unit 68, after (i.e., to the right of) A-V compression unit 64, where A-V

compression unit 64 is the last point in the transmission path where the interactive content may be corrupted).

As for claim 10, Zdepski and Lappington together disclose the method of claim 8. In addition, Zdepski discloses reading the interactive content code at a point in the transmission path prior to an interactive content in the second video stream being corrupted (see fig. 1, the interactive content code is read by trigger extraction unit 56, which is at a point in the transmission path prior to (i.e., to the left of) A-V compression unit 64, and hence the reading of the interactive content code occurs prior to the interactive content being corrupted, i.e., at A-V compression unit 64).

As for claim 11, Zdepski and Lappington together disclose the method of claim 8. In addition, Zdepski discloses the embedded interactive content code (trigger) is inserted into a region (i.e., the vertical blanking interval, col. 5, ll. 1-5) of the second video stream that is preserved by the broadcast facility (where trigger extraction unit 56 extracts information in the VBI for use prior to potentially corrupting equipment such as compression unit 56, hence the VBI is a region that is preserved by the broadcasting facility).

As for claim 12, Zdepski and Lappington together disclose the method of claim 8. In addition, Zdepski discloses reading the interactive content code (col. 4, ll. 19-27), wherein the interactive content is inserted (at 68) into the third video stream at a same point (broadcast station 50) in the transmission path (i.e., path from source 12 to end users) at which the interactive content code is read (at 56).

As for claim 13, Zdepski and Lappington together disclose the method of claim 12. In addition, Zdepski discloses reading the interactive content code (col. 4, ll. 19-27), wherein the interactive content

code is read at a point (at 56) in the transmission path after (i.e., to the right of) which broadcast facility equipment (A-V compression unit 64) that may corrupt an interactive content is coupled to the transmission path.

As for claim 28, Zdepski and Lappington together disclose the method of claim 8, wherein encrypting the interactive content code comprises disarranging elements of the interactive content code to produce a scrambled interactive content code (Lappington, col. 18, ll. 56-61).

With regard to claim 14, Zdepski discloses a method for providing interactive content (col. 3, ll. 49-51) in a broadcast facility (50, fig. 1) that transmits a video broadcast stream (AVI signal) containing video for delivery along a transmission path for delivery to end users (col. 4, ll. 34-38) and contains equipment (A-V compression unit 64) that may corrupt interactive content (according to page 6, ll. 3-6 of the specification of the instant application, such equipment includes video compression hardware), comprising:

inserting (by trigger insertion unit 16) an interactive content code (trigger, col. 4, ll. 51-58) into a first video stream (television signal, col. 4, ll. 7-10), resulting in a second video stream (combined signal) with embedded interactivity (col. 4, ll. 6-10), wherein the interactive content code specifies an interactive content to accompany a video broadcast (col. 4, ll. 47-51), and wherein the interactive content code is inserted into a region (i.e., the vertical blanking interval, col. 5, ll. 1-5) of the second video stream that is preserved by the broadcast facility (where trigger extraction unit 56 extracts information in the VBI for use prior to potentially corrupting equipment such as compression unit 56, hence the VBI is a region that is preserved by the broadcasting facility);

processing (compressing) the second video stream to produce a third video stream (col. 4, ll. 28-38); and

inserting an interactive content corresponding to (associated with, col. 4, ll. 47-50) the interactive content codes into the third video stream (combining the interactive program content with the compressed audio/video content, col. 4, ll. 33-38) at a point in the transmission path after a point in the transmission path where broadcast facility equipment that may corrupt the interactive content is coupled to the transmission path (see fig. 1, the interactive content is inserted into the video stream at AVI transmission unit 68, after (i.e., to the right of) A-V compression unit 64, where A-V compression unit 64 is the last point in the transmission path where the interactive content may be corrupted), to produce a fourth video stream (AVI signal, fig. 1).

Zdepski additionally discloses the interactive content code is encoded in the vertical blanking interval of the television signal, but fails to disclose encrypting the interactive content code.

In an analogous art, Lappington discloses encrypting data encoded within the vertical blanking interval of a television signal, for the purpose of ensuring reliable transmission thereof (col. 18, ll. 17-19).

Accordingly, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the system of Zdepski to include encrypting the interactive content code, for the purpose of ensuring reliable transmission of the interactive data.

With regard to claim 17, Zdepski discloses a method for providing interactive content (col. 3, ll. 49-51) in a broadcast facility (50, fig. 1) that transmits a video stream (AVI signal) containing video for delivery along a transmission path to end users (col. 4, ll. 34-38), the method comprising:

inserting a reference (trigger, col. 4, ll. 51-58) to an interactive content into a region (i.e., the vertical blanking interval, col. 5, ll. 1-5) of a first video stream (television signal), wherein the region is preserved by the broadcast facility (where trigger extraction unit 56 extracts information in the VBI for use prior to potentially corrupting equipment such as compression unit 56, hence the VBI is a region that

is preserved by the broadcasting facility), resulting in a second video stream (combined signal) with embedded interactivity (col. 4, ll. 6-10);

processing (A/V compressing) the second video stream, to produce a third video stream (col. 4, ll. 28-38);

inserting an interactive content corresponding to the reference (combining the interactive program content with the compressed audio/video content, col. 4, ll. 33-38) into the third video stream (), to produce a fourth video stream (AVI signal, fig. 1).

Zdepski additionally discloses the interactive content code is encoded in the vertical blanking interval of the television signal, but fails to disclose encrypting the interactive content code.

In an analogous art, Lappington discloses encrypting data encoded within the vertical blanking interval of a television signal, for the purpose of ensuring reliable transmission thereof (col. 18, ll. 17-19).

Accordingly, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the system of Zdepski to include encrypting the interactive content code, for the purpose of ensuring reliable transmission of the interactive data.

With regard to claim 19, Zdepski discloses a system for providing interactive content (fig. 1, col. 3, ll. 49-51) comprising:

hardware (trigger extraction unit 56, fig. 1) adapted to receive a first video stream (combined trigger-television signal, fig. 1) that includes video data and one or more interactive content codes (col. 4, ll. 6-10), and to produce a second video stream (television signal at output of 56, fig. 1)

an interactive content code detector (trigger extraction unit 56), coupled to the first video stream (combined signal from demodulator 54), adapted to detect one or more interactive content codes (trigger, col. 4, ll. 51-58) and to produce (providing to interactive program source 58) a control signal (the

extracted trigger) responsive to detecting (extracting) an interactive content code (trigger) (col. 4, ll. 19-24); and

a data insertion unit (interactive program source 58, data input unit 66, and AVI transmission unit 68), coupled to the interactive content code detector (56), adapted to receive (from 56, col. 4, ll. 21-22) the control signal (extracted trigger) and to insert (providing to AVI transmission unit 68 for combining with television signal, col. 4, ll. 28-38) interactive content (interactive program) into the second video stream (television signal) responsive to (in accordance with, col. 4, ll. 29-30) information (fields 82, 84, and 86 of trigger, fig. 2) contained in the control signal (extracted trigger), resulting in a third video stream (AVI signal, fig. 1) to be transmitted to one or more local subsystems (i.e., broadcasting equipment, fig. 1), wherein the data insertion unit (58, 66, and 68) is positioned to insert interactive content into the second video stream prior (i.e., no intervening equipment in signal path between AVI transmission unit 68 and satellite uplink 62, see fig. 1) to the third video stream (AVI signal) being transmitted to a transmission source (satellite uplink 62) causing the interactive content to remain in the third video stream upon transmission.

Zdepski additionally discloses the interactive content code is encoded in the vertical blanking interval of the television signal, but fails to disclose encrypting the interactive content code.

In an analogous art, Lappington discloses encrypting data encoded within the vertical blanking interval of a television signal, for the purpose of ensuring reliable transmission thereof (col. 18, ll. 17-19).

Accordingly, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the system of Zdepski to include encrypting the interactive content code, for the purpose of ensuring reliable transmission of the interactive data.

With regard to claim 20, Zdepski discloses a system for providing interactive content (fig. 1, col. 3, ll. 49-51) comprising:

local equipment (trigger extraction unit 56, fig. 1), adapted to receive one or more first signals (combined television-trigger signal, fig. 1) from a broadcast facility (remote network 10, fig. 1), wherein the one or more first signals include video data and one or more interactive content codes (col. 4, ll. 6-10), and to produce a first video stream (television signal at output of 56, fig. 1);

an interactive content detection unit (trigger extraction unit 56) adapted to detect (col. 4, ll. 19-21, where extracting inherently involves detecting) an interactive content code (trigger, col. 4, ll. 51-58) and to transmit (providing to interactive program source 58) a control signal (the extracted trigger) responsive to detecting (extracting) the interactive content code (trigger) (col. 4, ll. 19-24); and

a data insertion unit (interactive program source 58, data input unit 66, and AVI transmission unit 68), coupled to the interactive content code detector (56), adapted to receive (from 56, col. 4, ll. 21-22) the control signal (extracted trigger) and to insert (providing to AVI transmission unit 68 for combining with television signal, col. 4, ll. 28-38) interactive content (interactive program) into the first video stream (television signal) responsive to information (fields 82, 84, and 86 of trigger, fig. 2) contained in the control signal (extracted trigger), resulting in a second video stream (AVI signal, fig. 1).

Zdepski additionally discloses the interactive content code is encoded in the vertical blanking interval of the television signal, but fails to disclose encrypting the interactive content code.

In an analogous art, Lappington discloses encrypting data encoded within the vertical blanking interval of a television signal, for the purpose of ensuring reliable transmission thereof (col. 18, ll. 17-19).

Accordingly, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the system of Zdepski to include encrypting the interactive content code, for the purpose of ensuring reliable transmission of the interactive data.

As for claim 21, Zdepski and Lappington together disclose the system of claim 20. In addition, Zdepski discloses the data insertion unit (58, 66, and 68) is positioned to insert interactive content into the

first video stream prior (i.e., no intervening equipment in signal path between AVI transmission unit 68 and satellite uplink 62, see fig. 1) to the second video stream (AVI signal) being transmitted to customer premise equipment (end users, via satellite uplink 62, col. 4, ll. 36-38) causing the interactive content to remain in the second video stream upon transmission.

As for claim 22, Zdepski and Lappington together disclose the system of claim 20. In addition, Zdepski discloses the interactive content code detector (56) and the data insertion unit (58, 66, and 68) are coupled to a same point (broadcast station 50) in the transmission path (i.e., source 12 to end users).

As for claim 24, Zdepski and Lappington together disclose the system of claim 20. In addition, Zdepski discloses the interactive content code detector (56) is a vertical blanking interval reader (col. 5, ll. 24-26).

With regard to claim 27, Zdepski discloses a method of increasing a reliability for delivery of interactive content (col. 3, ll. 49-51), the method comprising the steps of:

inserting an interactive content code (trigger, col. 4, ll. 51-58) into a first component (vertical blanking interval, col. 5, ll. 1-5) of a first signal alternate to a second component, which is used to convey interactive content (interactive program information packets of AVI signal, col. 6, ll. 22-25);

processing (compressing) the first signal (television signal) to produce a second signal (compressed television signal, col. 4, ll. 28-38);

detecting (col. 4, ll. 19-21, where extracting inherently involves detecting) an interactive content code (trigger) in the first signal (television signal); and

inserting interactive content corresponding to (associated with, col. 4, ll. 47-50) the interactive content code into the second signal (col. 6, ll. 14-15) to produce a third signal (AVI signal, fig. 1).

Zdepski additionally discloses the interactive content code is encoded in the vertical blanking interval of the television signal, but fails to disclose encrypting the interactive content code.

In an analogous art, Lappington discloses encrypting data encoded within the vertical blanking interval of a television signal, for the purpose of ensuring reliable transmission thereof (col. 18, ll. 17-19).

Accordingly, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the system of Zdepski to include encrypting the interactive content code, for the purpose of ensuring reliable transmission of the interactive data.

4. Claims 6, 15, 18, and 23 are rejected under 35 U.S.C. 103(a) as being unpatentable over Zdepski and Lappington in view of Blackketter (of record).

With regard to claim 6, Zdepski and Lappington together disclose the system of claim 5. However, they fail to disclose the interactive content corresponds to a universal resource locator.

In an analogous art, Blackketter discloses inserting interactive content corresponding to a uniform resource locator (uniform resource identifier, col. 8, ll. 5-15 and col. 1, ll. 18-26), for the purpose of enabling the retrieval of Internet content such that the viewing experience may be enhanced (col. 8, ll. 5-15 and col. 1, ll. 26-30).

Consequently, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the system of Zdepski and Lappington to include disclose the interactive content corresponds to a universal resource locator, as taught by Blackketter, for the purpose of enabling the retrieval of Internet content such that the viewing experience may be enhanced in a system for providing interactive television content.

With regard to claim 15, Zdepski and Lappington together disclose the method of claim 14. However, they fail to disclose inserting a plurality of interactive content codes in different regions of the second video signal.

In an analogous art, Blackketter discloses inserting a plurality of interactive codes (first trigger and second trigger) inserted into different regions of data (i.e., a first region of data corresponding to a first time, and a second region of data corresponding to a second time, during which the first and second triggers are transmitted, respectively), for the purpose of improving reliability by sending redundant triggers (col. 7, l. 60 – col. 8, l. 15).

Consequently, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the system of Zdepski and Lappington to include inserting a plurality of interactive content codes in different regions of the video broadcast signal, as taught by Blackketter, for the purpose of improving reliability by sending redundant triggers in a method for providing interactive television content.

With regard to claim 18, Zdepski and Lappington together disclose the method of claim 17. In addition, Zdepski discloses inserting the reference (trigger) in a region (vertical blanking interval, col. 5, ll. 1-5) of the video stream that is preserved by the broadcast facility (where trigger extraction unit 56 extracts information in the VBI for use prior to potentially corrupting equipment such as compression unit 56, hence the VBI is a region that is preserved by the broadcasting facility). However, they fail to disclose the reference (trigger) is a uniform resource locator.

In an analogous art, Blackketter discloses the reference (trigger) is a uniform resource locator (uniform resource identifier, col. 8, ll. 5-15 and col. 1, ll. 18-26), for the purpose of enabling the retrieval of Internet content such that the viewing experience may be enhanced (col. 8, ll. 5-15 and col. 1, ll. 26-30).

Consequently, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the system of Zdepski and Lappington to include the reference is a universal resource locator, as taught by Blackketter, for the purpose of enabling the retrieval of Internet

content such that the viewing experience may be enhanced in a system for providing interactive television content.

With regard to claim 23, Zdepski and Lappington together disclose the system of claim 20. In addition, Zdepski discloses the data insertion unit inserts an interactive content (interactive program) corresponding to the interactive content code (trigger) (col. 4, ll. 47-50). However, they fail to disclose the interactive content code comprises a universal resource locator.

In an analogous art, Blackketter discloses the reference (trigger) is a uniform resource locator (uniform resource identifier, col. 8, ll. 5-15 and col. 1, ll. 18-26), for the purpose of enabling the retrieval of Internet content such that the viewing experience may be enhanced (col. 8, ll. 5-15 and col. 1, ll. 26-30).

Consequently, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the system of Zdepski and Lappington to include the reference is a universal resource locator, as taught by Blackketter, for the purpose of enabling the retrieval of Internet content such that the viewing experience may be enhanced in a system for providing interactive television content.

5. Claim 16 is rejected under 35 U.S.C. 103(a) as being unpatentable over Zdepski, Lappington and Blackketter as applied to claim 15 above, and further in view of Ciciora (of record).

With regard to claim 16, Zdepski, Lappington, and Blackketter together disclose the method of claim 15. However, they fail to explicitly disclose at least one of the different regions is preserved by at least one local subsystem.

In an analogous art, Ciciora discloses the use of SCTE standards for preserving closed captioning data fields for carriage of data embedded in the VBI to the set-top terminal (i.e., the transmission having

interfaced with at least one local subsystem), for the purpose of satisfying FCC regulations (pg. 101, §3.3.5).

Consequently, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the system of Zdepski, Lappington, and Blackketter to include at least one of the regions is preserved by at least one local subsystem, as taught by Ciciora, for the purpose of satisfying FCC regulations in a method for providing interactive television content.

6. Claim 25 is rejected under 35 U.S.C. 103(a) as being unpatentable over Zdepski in view of Lappington in view of Blackketter and further in view of Ciciora (of record).

With regard to claim 25, Zdepski discloses a method of ensuring reliable delivery of interactive content (col. 3, ll. 49-51) comprising:

inserting an interactive content code (trigger, col. 4, ll. 51-58) in the vertical blanking interval (col. 5, ll. 1-5) of a video stream (col. 4, ll. 7-10) to be broadcast to a plurality of local subsystems (such as satellites, local headends, distribution nodes, etc, encountered prior to the video stream being delivered to end users, col. 4, ll. 34-37), wherein the interactive content code corresponds to an interactive content to be inserted into the video stream (col. 4, ll. 47-50). Zdepski fails to explicitly disclose the interactive content code is encrypted; a plurality of interactive content codes inserted into different regions of data; and each region of data is preserved by at least one local subsystem.

In an analogous art, Lappington discloses encrypting data encoded within the vertical blanking interval of a television signal, for the purpose of ensuring reliable transmission thereof (col. 18, ll. 17-19).

Accordingly, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the system of Zdepski to include encrypting the interactive content code, for the purpose of ensuring reliable transmission of the interactive data.

Zdepski and Lappington fail to disclose a plurality of interactive content codes inserted into different regions of data; and each region of data is preserved by at least one local subsystem.

In an analogous art, Blackketter discloses a plurality of interactive codes (first trigger and second trigger) inserted into different regions of data (i.e., a first region of data corresponding to a first time, and a second region of data corresponding to a second time, during which the first and second triggers are transmitted, respectively), for the purpose of improving reliability by sending redundant triggers (col. 7, l. 60 – col. 8, l. 15).

Consequently, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the system of Zdepski and Lappington to include a plurality of interactive content codes inserted into different regions of data, as taught by Blackketter, for the purpose of improving reliability by sending redundant triggers.

Zdepski, Lappington, and Blackketter fail to disclose each region of data is preserved by at least one local subsystem.

In an analogous art, Ciciora discloses the use of SCTE standards for preserving closed captioning data fields for carriage of data embedded in the VBI to the set-top terminal (i.e., the transmission having interfaced with at least one local subsystem), for the purpose of satisfying FCC regulations (pg. 101, §3.3.5).

Consequently, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the system of Zdepski, Lappington, and Blackketter to include each region of data is preserved by at least one local subsystem, as taught by Ciciora, for the purpose of satisfying FCC regulations in a method of ensuring reliable delivery of interactive content.

7. Claim 26 is rejected under 35 U.S.C. 103(a) as being unpatentable over Zdepski in view Lappington in view of Kaiser (of record) and further in view of Ciciora.

With regard to claim 26, Zdepski discloses a method of ensuring reliable delivery of interactive content (col. 3, ll. 49-51) comprising: inserting an interactive content code (trigger, col. 4, ll. 51-58) into a vertical blanking region of a video stream (col. 5, ll. 1-5), wherein the interactive content code corresponds to an interactive content to be inserted into the video stream (col. 4, ll. 47-50). Zdepski fails to explicitly disclose the interactive content code is encrypted, and is inserted in a closed caption region, and the closed caption region is preserved by at least one local subsystem.

In an analogous art, Lappington discloses encrypting data encoded within the vertical blanking interval of a television signal, for the purpose of ensuring reliable transmission thereof (col. 18, ll. 17-19).

Accordingly, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the system of Zdepski to include encrypting the interactive content code, for the purpose of ensuring reliable transmission of the interactive data.

Zdepski and Lappington fail to disclose the interactive content code is inserted in a closed caption region, and the closed caption region is preserved by at least one local subsystem

In an analogous art, Kaiser discloses an interactive content code (trigger) inserted in a closed caption region (VBI line 21, col. 6, ll. 65-67), for the purpose of enabling the insertion of triggers using conventional closed-captioning equipment (col. 7, ll. 1-4).

Consequently, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the system Zdepski and Lappington to include the interactive content code is inserted in a closed caption region, as taught by Kaiser, for the purpose of enabling the insertion of triggers using conventional closed-captioning equipment.

Zdepski, Lappington, and Kaiser fail to explicitly disclose the closed caption region is preserved by at least one local subsystem

In an analogous art, Ciciora discloses the use of SCTE standards for preserving closed captioning data fields for carriage of data embedded in the VBI to the set-top terminal (i.e., the transmission having

interfaced with at least one local subsystem), for the purpose of satisfying FCC regulations (pg. 101, §3.3.5)

Consequently, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the system Zdepski, Lappington, and Kaiser to include the closed caption region is preserved by at least one local subsystem, as taught by Ciciora, for the purpose of satisfying FCC regulations in a method for ensuring reliable delivery of interactive content.

Conclusion

8. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

9. The following are suggested formats for either a Certificate of Mailing or Certificate of Transmission under 37 CFR 1.8(a). The certification may be included with all correspondence concerning this application or proceeding to establish a date of mailing or transmission under 37 CFR 1.8(a). Proper use of this procedure will result in such communication being considered as timely if the established date is within the required period for reply. The Certificate should be signed by the individual actually depositing or transmitting the correspondence or by an individual who, upon information and belief, expects the correspondence to be mailed or transmitted in the normal course of business by another no later than the date indicated.

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Please refer to 37 CFR 1.6(d) and 1.8(a)(2) for filing limitations concerning facsimile transmissions and mailing, respectively.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Christopher M. Lambrecht whose telephone number is (571) 272-7297. The examiner can normally be reached on 9:30 AM - 6:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Christopher Grant can be reached on (571) 272-7294. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Christopher M Lambrecht
Examiner
Art Unit 2611

CML

HAITRAN
PRIMARY EXAMINER